

## **ABSTRACT**

### **BACKGROUND:**

Although Laparoscopic surgeries compared with open surgery, associated with reduced surgical trauma and pain, still early post-operative pain after a laparoscopic procedure is a common complaint. The aim of this project is to study the analgesic effect of port site infiltration of bupivacaine and compare it with efficacy and side effects of conventional analgesics in laparoscopic surgeries.

### **STUDY DESIGN:**

Prospective, Randomized, Controlled study

### **MATERIALS AND METHODS:**

This study includes 100 patients, ASA I and II grade, scheduled for laparoscopic surgery in the department of general surgery, Coimbatore medical college hospital, Coimbatore between August 2015 to September 2016. The study was approved by ethical committee of the hospital and informed written consent obtained from all the patients. Patients were randomly divided into 2 groups, containing 50 patients each. Randomization was done consecutively i.e. first candidate was allocated to Bupivacaine while the second patient was allocated to conventional analgesia.

GROUP-A : Received 20 ml of 0.25% Bupivacaine was infiltrated through the abdominal wall around each port site. (5 ml to each port site) (6ml for 10mm port and 4ml for 5mm port).

GROUP-B: Received 100 mg of tramadol-slow IV at the end of the procedure.

Patients with uncomplicated symptomatic cholelithiasis, sub acute appendicitis, incisional hernia, inguinal hernia under ASA I and II were included in study and patients with ASA III or more and patients who had hypersensitivity to drugs were excluded from the study. The primary analysis of this study was intensity of post-operative pain was assessed using the visual analogue scale at 1,4,8 and 12 hrs after surgery. The secondary analysis includes rescue analgesia<sup>2</sup> requirement and side effects of opioids.

## **RESULTS:**

There is no significant difference between the groups in terms of age (p-0.854), the weight of the patients (p-0.880) and duration of surgery in minutes (p-0.960). A number of patients having moderate to severe pain was higher in group B after surgery compared to those in group A. Lower visual analogue scores were observed in group A compared to group B at 1,4,8 and 12 hrs which is significant with p-value – 0.001. Rescue analgesic consumption in the first 12 hrs after surgery was also significantly less in group A (87% required no

dose,19% demanding once,22% twice) compared to group B (13%required no dose,81%demanding once,78%twice) with p-value-0.001.the side effects were also significantly less in group A compared to group B(P-0.037).

## **KEY WORDS**

Local anaesthesia, laparoscopy, bupivacaine, visual analogue scale, post-operative pain.